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Exhibit R-2, RDT&E Budget Item Justification: PB 2022 Army **Date:** May 2021

Appropriation/Budget Activity 2040: <i>Research, Development, Test & Evaluation, Army / BA 5: System Development & Demonstration (SDD)</i>	R-1 Program Element (Number/Name) PE 0605030A / <i>Joint Tactical Network Center (JTNC)</i>
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COST (\$ in Millions)	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
Total Program Element	-	15.228	15.671	16.364	-	16.364	-	-	-	-	-	-
EA8: <i>Joint Tactical Networking Center</i>	-	15.228	15.671	16.364	-	16.364	-	-	-	-	-	-

A. Mission Description and Budget Item Justification

This funding line supports the Army Network Modernization Strategy line of effort (LOE) 1, Unified Network. Efforts are aligned to support the Network-Cross Functional Team capability set approach to achieve the network modernization strategy.

The Joint Tactical Networking Center (JTNC) is chartered to enable the Department of Defense (DoD)'s rapid identification, characterization, procurement, fielding, and sustainment of modular, innovative tactical communications products that ensure secure, interoperable, and resilient Command, Control, Communications, Computers, Intelligence, Surveillance, and Reconnaissance (C4ISR) capabilities. The JTNC provides technical expertise to facilitate tactical communications management, innovation, and standardization. The JTNC: (1) maintains a cyber-hardened DoD Information Repository (IR), (2) provides Technical Analyses/Capability Characterizations on tactical communications products, (3) provides Open Systems Architecture Standards, (4) exportability analysis and licensing reviews, and (5) serves as Technical Advisor to the Communications, Command, and Control Leadership Board (C3LB) and Tactical Communications Senior Steering Group (TCSSG).

JTNC mission is executed in coordination with key government stakeholders to include: C3LB, TCSSG, Communications Technologies and Waveforms Working Group (CTWWG), the Department of Defense (DoD) Chief Information Officer (CIO), Under Secretary of Defense for Acquisition and Sustainment (USD(A&S)), Joint Staff J6 (JS J6), The Under Secretary of Defense for Research and Engineering, abbreviated USD(R&E), and the Services. Particular attention is paid to ensuring that interagency work is collaborative and eliminates duplicative capability. The JTNC enables a common software baseline that is hardware agnostic leading to increased competition for Software Defined Radios (SDR).

Through collaboration with DoD matrixed and industry partners, the JTNC is engaged in the analysis of directed software and artifacts, and support of the National Security Agency (NSA) Commercial Communications Security (COMSEC) Evaluation Program (CCEP). Additionally, the JTNC participates in Standards-related activities such as the Interface Control Working Group (ICWG), and continues evolving its Capabilities Characterization and Joint Communications Marketplace (CC & JCM) and Modular Radio Architecture (MRA) processes. Further JTNC directed requirements outlined by the C3LB consist of CTWWG, Joint All-Domain Command and Control (JADC2), continued development/maturation of the DoD IR framework and eventual Cloud migration, and JCM Development to meet DoD/Industry requirements in conjunction with DoD Instruction 4630.09.

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Appropriation/Budget Activity 2040: <i>Research, Development, Test & Evaluation, Army / BA 5: System Development & Demonstration (SDD)</i>	R-1 Program Element (Number/Name) PE 0605030A / <i>Joint Tactical Network Center (JTNC)</i>
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B. Program Change Summary (\$ in Millions)	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
Previous President's Budget	15.882	16.264	5.830	-	5.830
Current President's Budget	15.228	15.671	16.364	-	16.364
Total Adjustments	-0.654	-0.593	10.534	-	10.534
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-0.654	-0.593			
• Adjustments to Budget Years	-	-	10.534	-	10.534

Change Summary Explanation

FY22 increase represents the funding from the consolidation of this program from Navy (PE 0605030N) and Air Force, (PE 0605030F) into Army (0605030A) via Resource Management Decision (RMD).

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Exhibit R-2A, RDT&E Project Justification: PB 2022 Army										Date: May 2021		
Appropriation/Budget Activity 2040 / 5					R-1 Program Element (Number/Name) PE 0605030A / <i>Joint Tactical Network Center (JTNC)</i>				Project (Number/Name) EA8 / <i>Joint Tactical Networking Center</i>			
COST (\$ in Millions)	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
EA8: <i>Joint Tactical Networking Center</i>	-	15.228	15.671	16.364	-	16.364	-	-	-	-	-	-
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

Note

Joint Tactical Networking Center (JTNC) is funded using a Joint budget strategy. Each Military Department (MILDEP) budgets for approximately one-third of the total program RDT&E requirements for joint efforts. Fiscal Year (FY) 2020 to FY 2022 funding reflects the full JTNC requirement with the consolidated funding from the other Services. FY 2023 and beyond reflects the Army one-third portion of total program Research Development Test & Evaluation (RDT&E) funds. Out-year funding is programmed in PE 0605030A by the Army, PE 0605030N by the Navy and PE 0605030F by the Air Force. Prior to submission of the President's Budget, the funding is consolidated in Army PE 0605031A for execution per OSD direction.

A. Mission Description and Budget Item Justification

This funding line supports the Army Network Modernization Strategy line of effort (LOE) 1, Unified Network. Efforts are aligned to support the Network-Cross Functional Team capability set approach to achieve the network modernization strategy.

The Joint Tactical Networking Center (JTNC) is chartered to enable the Department of Defense (DoD)'s rapid identification, characterization, procurement, fielding, and sustainment of modular, innovative tactical communications products that ensure secure, interoperable, and resilient Command, Control, Communications, Computers, Intelligence, Surveillance, and Reconnaissance (C4ISR) capabilities. The JTNC provides technical expertise to facilitate tactical communications management, innovation, and standardization. The JTNC: (1) maintains a cyber-hardened DoD Information Repository (IR), (2) provides Technical Analyses/Capability Characterizations on tactical communications products, (3) provides Open Systems Architecture Standards, (4) exportability analysis and licensing reviews, and (5) serves as Technical Advisor to the Communications, Command, and Control Leadership Board (C3LB) and Tactical Communications Senior Steering Group (TCSSG).

JTNC mission is executed in coordination with key government stakeholders to include: C3LB, TCSSG, Communications Technologies and Waveforms Working Group (CTWWG), the Department of Defense (DoD) Chief Information Officer (CIO), Under Secretary of Defense for Acquisition and Sustainment (USD(A&S)), Joint Staff J6 (JS J6), The Under Secretary of Defense for Research and Engineering, abbreviated USD(R&E), and the Services. Particular attention is paid to ensuring that interagency work is collaborative and eliminates duplicative capability. The JTNC enables a common software baseline that is hardware agnostic leading to increased competition for Software Defined Radios (SDR).

Through collaboration with DoD matrixed and industry partners, the JTNC is engaged in the analysis of directed software and artifacts, and support of the National Security Agency (NSA) Commercial Communications Security (COMSEC) Evaluation Program (CCEP). Additionally, the JTNC participates in Standards-related activities such as the Interface Control Working Group (ICWG), and continues evolving its Capabilities Characterization and Joint Communications Marketplace (CC & JCM) and Modular Radio Architecture (MRA) processes. Further JTNC directed requirements outlined by the C3LB consist of CTWWG, Joint All-Domain Command and

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Exhibit R-2A, RDT&E Project Justification: PB 2022 Army	Date: May 2021
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Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0605030A / <i>Joint Tactical Network Center (JTNC)</i>	Project (Number/Name) EA8 / <i>Joint Tactical Networking Center</i>
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Control (JADC2), continued development/maturation of the DoD IR framework and eventual Cloud migration, JCM Development to meet DoD and Industry requirements in conjunction with DoD Instruction 4630.09.

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2020	FY 2021	FY 2022
<p>Title: DoD Waveform IR Support, Waveform Standards Evolution and Compliance & Certification Analysis</p> <p>Description: Joint Tactical Networking Center (JTNC) aligns with the Communications, Command, and Control Leadership Board (C3LB), DoD Chief Information Officer (CIO), Joint Staff, the Services, and other key stakeholders for those JTNC chartered processes that ensure secure, interoperable, and resilient tactical communications. The JTNC: (1) maintains a cyber-hardened DoD Information Repository (IR), (2) provides Technical Analyses/Capability Characterizations on tactical communications products, (3) provides Open Systems Architecture Standards, (4) exportability analysis and licensing reviews, and (5) serves as Technical Advisor to the JTNC Board of Directors (BoD). The Joint Tactical Networking Center supports the Army's Network Modernization Strategy Line of Effort 1A - Unified Network.</p> <p>FY 2021 Plans: Continue analysis of Communications, Command, and Control Leadership Board approved waveforms in accordance with Service priorities and the FY 2021 JTNC Management Plan. Continue collecting relevant software, technical documentation, cataloging and inducting other DoD Communication Waveforms listed in the DoD Communication Waveform Inventory. Continue to enhance DoD IR capability and approved Standards promulgation.</p> <p>JTNC will serve as a technical advisor and source of engineering and analytic resources for the Lead Services in the conduct of Joint enterprise-level systems engineering and analysis and support DoD CIO in oversight of Lead Service activities with engineering expertise and assist in the identification and resolution of cross-service networking disconnects or issues. The JTNC will lead development and promulgation of the Modular Radio Architecture (MRA), a framework containing a collection of DoD standards and a description or architecture of how to use them to compose or control a communications system. The MRA defines how to implement a communications system or radio on select platforms.</p> <p>Continue the development of the tactical communications vendor product capability characterization process for commercial off-the-shelf (COTS) and non-developmental item (NDI) tactical communication products. Continue to evolve DoD Waveform Standards to facilitate common development, interoperability and re-use, reducing product development time and facilitating faster delivery of capabilities to warfighters. Continue to conduct technical waveform and software artifact analyses against published standards. Continue to support export requests and analyses of products for exportability. Continue to certify secure, reusable software waveforms based on Government controlled open architecture to encourage a competitive, cost effective, interoperable networking environment.</p>	15.228	15.671	16.364

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Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0605030A / <i>Joint Tactical Network Center (JTNC)</i>	Project (Number/Name) EA8 / <i>Joint Tactical Networking Center</i>		
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2020	FY 2021	FY 2022
<p>Conduct technical waveform and software artifact analyses against published standards. Support export requests and analyses of products for exportability. Certify secure, reusable software waveforms based on Government controlled open architecture to encourage a competitive, cost effective, interoperable networking environment.</p> <p>FY 2022 Plans: Continue analysis of C3LB approved waveforms in accordance with Service priorities and the FY 2022 JTNC Management Plan. The JTNC will continue to support both the Services and Principal Staff Assistant (DoD CIO) in oversight of Lead Service activities and assist in the identification and resolution of cross-service networking disconnects. JTNC will be engaged in Joint All Domain Command and Control (JADC2) Operational Planning Teams/systems engineering support across the Services. The JTNC will enhance DoD IR capabilities by evolving framework compliance and Cloud migration. Continue Joint Communications Marketplace (JCM) development to meet DoD and Industry requirements in conjunction with DoD Instruction 4630.09. Continue managing Joint warfighter challenges and solutions as assigned by the TCSSG.</p> <p>The JTNC will continue collecting relevant software, technical documentation, cataloging and inducting other DoD and industry Communication Waveforms listed in the DoD Communication Waveform Inventory. Continue to enhance DoD IR capability and approved standards promulgation.</p> <p>The JTNC will continue development of tactical communications vendor product capability characterizations for commercial off-the-shelf (COTS) and non-developmental item (NDI) tactical communication products. Continue to evolve DoD Waveform Standards to facilitate common development, interoperability and re-use, reducing product development time and facilitating faster delivery of capabilities to warfighters. Continue to support export requests and analyses of products for exportability. Continue development of MRA. Conduct technical waveform and software artifact analyses against published standards. Support export requests and analyses of products for exportability. Certify secure, reusable software waveforms based on Government controlled open architecture to encourage a competitive, cost effective, interoperable networking environment.</p> <p>FY 2021 to FY 2022 Increase/Decrease Statement: Delta between FY21 and FY22 is inflation adjustment to budget years.</p>				
Accomplishments/Planned Programs Subtotals		15.228	15.671	16.364
C. Other Program Funding Summary (\$ in Millions)				
N/A				

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Exhibit R-2A, RDT&E Project Justification: PB 2022 Army		Date: May 2021
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0605030A / <i>Joint Tactical Network Center (JTNC)</i>	Project (Number/Name) EA8 / <i>Joint Tactical Networking Center</i>

C. Other Program Funding Summary (\$ in Millions)

Remarks

The Joint Tactical Networking Center is funded by all the Services. The Joint Funding Strategy requires each of the three Service Military Departments (MILDEPs) to budget for one-third of the total program approved requirement. Army funding in FY 2023 and beyond reflects only approximately one-third of total funding. Other funding is as follows (PB21 locked positions):

Navy RDTE: 0605030N, 3077. FY 2022 = 0 // FY 2023 = 5,130 // FY 2024 = 5,251 // FY 2025 = 5,366 // FY 2026 = 5,473 // FY 2027 = 5,583
 Air Force RDTE: 0605030F, 655068. FY 2022 = 0 // FY 2023 = 5,969 // FY 2024 = 6,088 // FY 2025 = 6,210 // FY 2026 = 6,334 // FY 2027 = 6,461

Due to Joint Funding Strategy, there is no prior year funding for JTNC in the other Service lines. Prior to the year of execution, the JTNC funding is consolidated in Army PE 0605030A for execution. In accordance with the Joint Tactical Networking Center Charter updated and re-validated on 13 September 2019, the JTNC will remain under a Joint Budget Strategy funded by the three MILDEPs.

D. Acquisition Strategy

The Joint Tactical Networking Center (JTNC) is a Joint support program to the Services, the DoD Chief Information Officer (CIO), the Under Secretary of Defense for Acquisition and Sustainment (USD(A&S)), and USD Research and Engineering (USD(R&E)). JTNC core functions as defined in the JTNC Acquisition Decision Memorandum and Charter signed on 20 January 2014 and revalidated on 13 September 2019 include execution in the following areas: Information Repository, Technical Analysis, Open Systems Architecture Standards, Exportability Analysis and Licensing Review, and Technical Advisor to the C3LB. The services derived from these core functions reinforce an acquisition environment which ensures that interoperable, secure, and resilient joint tactical waveforms and wireless communications applications can operate in a variety of hardware transport solutions.

The FY22 Budget supports continued development/maturation of the DoD IR, analysis of directed software and artifacts, support of the National Security Agency (NSA) Commercial Communications Security (COMSEC) Evaluation Program (CCEP), JTNC Standards Interface Control Working Group (ICWG), the Capabilities Characterization and Joint Communications Marketplace (CC & JCM). The FY22 budget supports the Lead Service Initiative where JTNC will serve as a technical advisor and source of engineering and analytic resources in the conduct of Joint enterprise-level systems engineering and analysis and support DoD CIO. The FY22 budget supports the continued management of Joint warfighter challenges and solutions as assigned by the TCSSG. The FY22 budget supports Modular Radio Architecture (MRA) work, where JTNC will lead development and promulgation of a framework containing a collection of DoD standards and a description or architecture of how to use these to compose or control a communications system. The MRA defines how to implement a communications system or radio on select platforms.

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2022 Army												Date: May 2021			
Appropriation/Budget Activity				R-1 Program Element (Number/Name)					Project (Number/Name)						
2040 / 5				PE 0605030A / Joint Tactical Network Center (JTNC)					EA8 / Joint Tactical Networking Center						
Management Services (\$ in Millions)				FY 2020		FY 2021		FY 2022 Base		FY 2022 OCO		FY 2022 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Program Management Support	Various	Multiple Contract Awards : Various	7.131	0.138	Oct 2019	0.183	Oct 2020	0.186	Oct 2021	-		0.186	Continuing	Continuing	Continuing
Program Management Support	C/CPFF	G2 Software Systems : San Diego, CA	3.787	0.407	Nov 2019	0.484	Nov 2020	0.508	Nov 2021	-		0.508	Continuing	Continuing	Continuing
Program Management Support	MIPR	NIWC PACIFIC : San Diego, CA	0.364	0.354	Nov 2019	0.397	Dec 2020	0.406	Dec 2021	-		0.406	Continuing	Continuing	Continuing
Program Management Support	Allot	Aberdeen Proving Grounds : Aberdeen, MD	1.112	-		-		-		-		-	0.000	1.112	1.112
JTNC SBIR/STTR Transfer	TBD	Various : Various	-	0.654		-		-		-		-	0.000	0.654	0.721
Program Management Support	FFRDC	MITRE : McLean, VA	0.058	-		-		-		-		-	0.000	0.058	0.058
Subtotal			12.452	1.553		1.064		1.100		-		1.100	Continuing	Continuing	N/A
Product Development (\$ in Millions)				FY 2020		FY 2021		FY 2022 Base		FY 2022 OCO		FY 2022 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
JTNC Product Development Support	MIPR	NIWC PACIFIC : San Diego, CA	4.601	0.470	Oct 2019	0.512	Oct 2020	0.537	Oct 2021	-		0.537	Continuing	Continuing	Continuing
JTNC Product Development Support	C/CPFF	G2 Software Systems : San Diego, CA	11.206	2.715	Nov 2019	2.965	Nov 2020	3.052	Nov 2021	-		3.052	Continuing	Continuing	Continuing
JTNC Product Development Support	MIPR	NIWC ATLANTIC : Charleston, SC	0.204	2.948	Oct 2019	2.956	Oct 2020	3.072	Oct 2021	-		3.072	Continuing	Continuing	Continuing
JTNC Product Development Support	C/CPFF	NIWC ATLANTIC JCM : Atlanta, GA	-	-		-		0.456	Oct 2021	-		0.456	Continuing	Continuing	Continuing
JTNC Product Development Support	C/CPFF	Various : San Diego, CA	2.246	0.002	Nov 2019	0.049	Nov 2020	-		-		-	0.000	2.297	2.299

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2022 Army **Date:** May 2021

Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0605030A / Joint Tactical Network Center (JTNC)	Project (Number/Name) EA8 / Joint Tactical Networking Center
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Product Development (\$ in Millions)				FY 2020		FY 2021		FY 2022 Base		FY 2022 OCO		FY 2022 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
JTNC Product Development	C/CPFF	Booz Allen Hamilton : San Diego, CA	1.184	-		-		-		-		-	0.000	1.184	1.184
JTNC Product Development - Other	Allot	Aberdeen Proving Grounds : Aberdeen, MD	0.382	-		-		-		-		-	0.000	0.382	0.382
Joint Tactical Networks (JTN) Legacy Development - MIPR	MIPR	Various : Various	19.868	-		-		-		-		-	0.000	19.868	19.868
Joint Tactical Networks (JTN) Legacy Development - Contracts	C/CPIF	Various : Various	24.890	-		-		-		-		-	0.000	24.890	24.890
Subtotal			64.581	6.135		6.482		7.117		-		7.117	Continuing	Continuing	N/A

Support (\$ in Millions)				FY 2020		FY 2021		FY 2022 Base		FY 2022 OCO		FY 2022 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
JTNC Engineering/ Technical Support	C/CPFF	G2 Software Systems : San Diego, CA	6.238	0.673	Nov 2019	0.771	Nov 2020	0.809	Nov 2021	-		0.809	Continuing	Continuing	Continuing
JTNC Engineering/ Technical Support	FFRDC	MITRE Corporation : McLean, VA	0.977	0.102	Oct 2019	0.146	Oct 2020	0.154	Oct 2021	-		0.154	Continuing	Continuing	Continuing
JTNC Engineering/ Technical Support	MIPR	Aberdeen Proving Grounds : Aberdeen, MD	2.783	0.719	Nov 2019	0.757	Nov 2020	0.795	Nov 2021	-		0.795	Continuing	Continuing	Continuing
JTNC Engineering/ Technical Support	MIPR	NIWC PACIFIC : San Diego, CA	2.545	0.847	Oct 2019	0.883	Oct 2020	0.926	Oct 2021	-		0.926	Continuing	Continuing	Continuing
JTNC Engineering/ Technical Support	MIPR	Various : San Diego, CA	1.662	-		-		-		-		-	0.000	1.662	1.662
JTNC Engineering/ Technical Support	C/CPFF	Booz Allen Hamilton : San Diego	14.965	-		-		-		-		-	0.000	14.965	14.965

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2022 Army												Date: May 2021			
Appropriation/Budget Activity				R-1 Program Element (Number/Name)				Project (Number/Name)							
2040 / 5				PE 0605030A / Joint Tactical Network Center (JTNC)				EA8 / Joint Tactical Networking Center							
Support (\$ in Millions)				FY 2020		FY 2021		FY 2022 Base		FY 2022 OCO		FY 2022 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Subtotal			29.170	2.341		2.557		2.684		-		2.684	Continuing	Continuing	N/A
Test and Evaluation (\$ in Millions)				FY 2020		FY 2021		FY 2022 Base		FY 2022 OCO		FY 2022 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Development/Test & Evaluation	MIPR	NIWC PACIFIC : San Diego, CA	7.431	1.877	Oct 2019	1.899	Oct 2020	1.982	Oct 2021	-		1.982	Continuing	Continuing	Continuing
Development/Test & Evaluation	C/CPFF	G2 Software Systems : San Diego, CA	9.610	2.794	Nov 2019	3.051	Nov 2020	3.131	Nov 2021	-		3.131	Continuing	Continuing	Continuing
Development/Test & Evaluation	C/CPFF	Multiple Awards : Various	1.511	0.309	Nov 2019	0.353	Nov 2020	0.350	Nov 2021	-		0.350	Continuing	Continuing	Continuing
Development/Test & Evaluation	C/CPFF	Booz Allen Hamilton - NSA : Ft. Meade, MD	0.280	0.219	Nov 2019	0.265	Nov 2020	-		-		-	0.000	0.764	0.774
Development/Test & Evaluation	MIPR	National Security Agency : Ft. Meade, MD	0.775	-		-		-		-		-	0.000	0.775	0.775
Development/Test & Evaluation	C/CPFF	G2 Software Systems 04 : San Diego, CA	5.078	-		-		-		-		-	0.000	5.078	5.078
Development/Test & Evaluation	MIPR	NIWC ATLANTIC : Charleston, SC	0.160	-		-		-		-		-	0.000	0.160	0.160
Development/Test & Evaluation	C/CPFF	Booz Allen Hamilton : San Diego, CA	1.242	-		-		-		-		-	0.000	1.242	1.242
Subtotal			26.087	5.199		5.568		5.463		-		5.463	Continuing	Continuing	N/A
Project Cost Totals			132.290	15.228		15.671		16.364		-		16.364	Continuing	Continuing	N/A

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2022 Army							Date: May 2021			
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	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	Cost To Complete	Total Cost	Target Value of Contract	

Remarks

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Exhibit R-4, RDT&E Schedule Profile: PB 2022 Army		Date: May 2021
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0605030A / <i>Joint Tactical Network Center (JTNC)</i>	Project (Number/Name) EA8 / <i>Joint Tactical Networking Center</i>

Event Name	FY 2020				FY 2021				FY 2022				FY 2023				FY 2024				FY 2025				FY 2026			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Waveform and Wireless Product Compliance and Certification	[Redacted]																											
<i>JTNC Waveform and Wireless Certification</i>	[Redacted]																											
DoD Information Repository	[Redacted]																											
<i>JTNC Information Repository</i>	[Redacted]																											
Evolve Waveform Standards	[Redacted]																											
<i>JTNC Standards</i>	[Redacted]																											
Analyze Waveforms and Associated Artifacts	[Redacted]																											
<i>JTNC Analyses</i>	[Redacted]																											
Joint Communications Marketplace (JCM) and Capabilities Cha	[Redacted]																											
<i>JTNC Innovation</i>	[Redacted]																											
Support to TCSSG and CTWWG activities	[Redacted]																											
<i>JTNC Joint Activities</i>	[Redacted]																											

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Exhibit R-4A, RDT&E Schedule Details: PB 2022 Army		Date: May 2021
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0605030A / <i>Joint Tactical Network Center (JTNC)</i>	Project (Number/Name) EA8 / <i>Joint Tactical Networking Center</i>

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Waveform and Wireless Product Compliance and Certification	1	2020	4	2026
DoD Information Repository	1	2020	4	2026
Evolve Waveform Standards	1	2020	4	2026
Analyze Waveforms and Associated Artifacts	1	2020	4	2026
Joint Communications Marketplace (JCM) and Capabilities Characterization (CC)	1	2020	4	2026
Support to TCSSG and CTWWG activities	1	2020	4	2026